## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

## ENTERED



**IFWP** 

RAW SEQUENCE LISTING DATE: 05/15/2006
PATENT APPLICATION: US/10/578,387 TIME: 09:45:59

Input Set : A:\seqlst.txt

4 <110> APPLICANT: Long, Li 5 Lugman, Mohammad

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Yabannavar, Asha
             Zaror, Isabel
     9 <120> TITLE OF INVENTION: Use of Antagonist Anti-CD40 Monoclonal
        Antibodies for Treatment of Multiple Myeloma
     13 <130> FILE REFERENCE: PP22589.002 (282915)
C--> 15 <140> CURRENT APPLICATION NUMBER: US/10/578,387
C--> 15 <141> CURRENT FILING DATE: 2006-05-02
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     16 <151> PRIOR FILING DATE: 2004-04-26
     18 <150> PRIOR APPLICATION NUMBER: 60/565,710
     19 <151> PRIOR FILING DATE: 2004-04-27
     21 <150> PRIOR APPLICATION NUMBER: 60/525,579
     22 <151> PRIOR FILING DATE: 2003-11-26
     24 <150> PRIOR APPLICATION NUMBER: 60/517,337
     25 <151> PRIOR FILING DATE: 2003-11-04
     27 <160> NUMBER OF SEQ ID NOS: 12
     29 <170> SOFTWARE: FastSEQ for Windows Version 4.0
     31 <210> SEQ ID NO: 1
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    33 <212> TYPE: DNA
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     46
                         5
     48 gga too agt ggg gat att gtg atg act cag tot coa ctc too ctg acc
                                                                           96
     49 Gly Ser Ser Gly Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Thr
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                                                                           144
     52 gtc acc cct gga gag ccg gcc tcc atc tcc tgc agg tcc agt cag agc
     53 Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser
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                                                                           192
     56 ctc ctg tat agt aat gga tac aac tat ttg gat tgg tac ctg cag aag
     57 Leu Leu Tyr Ser Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys
     58
             50
                                 55
     60 cca ggg cag tot cca cag gto otg ato tot ttg ggt tot aat cgg gco
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     61 Pro Gly Gln Ser Pro Gln Val Leu Ile Ser Leu Gly Ser Asn Arg Ala
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Input Set : A:\seqlst.txt

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-	Arg Arg Thr		Pro Ser Val Ph	e Ile Phe Pro
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82 145	150		155	160
			aaa gta cag tg	
86 Leu Asn Asn	165	Arg Gru Ara	Lys Val Gln Tr 170	p Lys var Asp 175
		aac tcc cac	gag agt gtc ac	_ · ·
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112 <223> OTHE		w: Light Cha	III OI 12.12 Huii	an anti-ch40 antibody
<del></del>		n Leu Leu Gl	y Leu Leu Met L	eu Tro Val Ser
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	_		r Gln Ser Pro L	
118	20	25		30
			e Ser Cys Arg S	er Ser Gln Ser
120 35	-	40		5
	r Ser Asn Gl	y Tyr Asn Ty	r Leu Asp Trp T	yr Leu Gln Lys
122 50	•	55	60	
123 Pro Gly Gl	n Ser Pro Gl	n Val Leu Il	e Ser Leu Gly S	er Asn Arg Ala
124 65	70		75	80
125 Ser Gly Va	l Pro Asp Ar	g Phe Ser Gl	y Ser Gly Ser G	ly Thr Asp Phe

Input Set : A:\seqlst.txt

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130			115					120					125				
131	Val	Asp	Ile	Arg	Arg	Thr	Val	Ala	Ala	Pro	Ser	Val	Phe	Ile	Phe	Pro	
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133	Pro	Ser	Asp	Glu	Gln	Leu	Lys	Ser	Gly	Thr	Ala	Ser	Val	Val	Cys	Leu	
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138				180					185					190			
	Ser	Lys	_	Ser	Thr	Tyr	Ser		Ser	Ser	Thr	Leu		Leu	Ser	Lys	
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	Ala	_	Tyr	Glu	Lys	His		Val	Tyr	Ala	Cys		Val	Thr	His	Gln	
142	_	210					215		_		_	220			_		
	_	Leu	Ser	Ser	Pro		Thr	Lys	Ser	Phe		Arg	GLY	Glu	Cys		
	225				_	230					235						
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	<213			ISM:	ALU	LIIC.	Lal 3	seque	ence								
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154		ar	nti-(	CD40	anti			_	_		5 101	. 116	avy (	JIIali	1 01	12.12	IIumaii
154 156	<400	ar O> SI	nti-( EQUE	CD40 NCE:	anti	ibody	y (w	ith	intro	ons)			-				
154 156 157	<400 atg	ar 0> SI gagtt	nti-( EQUE Etg (	CD40 NCE: ggctg	anti 3 gaget	ibody	y (wi	ith :	intro	ons) .gcta	attt	taag	- gaggt	igt (	ccagt	gtcag	60
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154 156 157 158 159 160 161 162 163 164 165 166 167 168 170 171 172 173 174	<400 atgg gtg gg caa atag actg atcg gagg tctg gg gg caa atgg actg ctcg gagg tctg gg ccaa actg gagg tctg gg ccaa	ar  SI  SI  Gagtt  Gagtt  Gagge  Cogt  Accas  Gagge  Cogge  Cogg  Cogge  Cogg  Co	nti-Capurate of the capurate o	CD40 NCE: ggcto tggao tggao tggao tggao tcago tcago tcago tcago tcaco tc	anti  3  gaget gatete gateg cegat cagae gacee gacee gacee gacee gacee cacee gacee cacee gacee cacee gacee cacee	ibody  gg gg gg gg gt ca  gt ca  gt gg	gtttt ggagg ctcag gaggg accat gaggg cactg ccag catgg catgg catgc catgc catgc	ith : tectt gegteg gtage ttata tetee acace gggae tecegteg gcae cegteg cetae acace ggcae cetae acace gcae cetae acace cetae acace cetae acace cetae acace cetae acace cetae acace cetae	intro  gti  gti  gti  gti  cti  atca  ggi  ggi  cta  acca  ggi  cta  cta  ggi  cta  cta  ggi  cta  cta  ggi	ons)  coage cage atate agaca cate caage caage agage agage agage agage aggaa	attt cotg atgc gagg aatt cacca gccgg aggg aggtc aggtc ccct	taag ggag actg acag ccag actg gcag acc ctgf gctf acag cccg ttcf gcag	gaggi ggtco gggtco gtaai gtgco agago cocta agago cocta agago cocta agago cocta	tgt of cot of co	ccagt gagac ccagg atacc gctgt agat cctct ggtct tcctc tcgggc ttccc ttccc gggca	egtcag etctcca getcca catgca catctg gggggt ccagga ecctac gacgaga gacgca ccaggc eccaggc eccaggc	60 120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080
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154 156 157 158 159 160 161 162 163 164 165 166 167 171 172 173 174 175 176	<400 atgg gtg ggact caas act at cas act at	ar  SI  SI  SI  SI  SI  SI  SI  SI  SI  S	ti-CEQUEI CETT CETT CETT CETT CETT CETT CETT CETT	CD40 NCE: ggcto tggao tggao tggao tggao tcago tcago tcago tcago tcago tcacao tc	anti  3  gaget gatet gategat cagaa gaget gatee	ibody  gg gg gg gg gc cf gg gg gc cf gc cg gg gg gc cf gg	gtttt ggagg ctcag gcagt accat gaggg cctgg ccag gccag gccag gccag gccag gccag gccag gccag gccag gccag gccag gccat gccag gccat gccag gcca gcca gccag gcca gcca gcca gcca gcca gcca gcca gcca gcca gcca gcca gcca gcc	ith : teett gegteg gtag ttata teete acace gggg ceete agga tegte cegte cegte cetaa cectaa	intro  gti  gti  gti  gti  gti  gti  gti  gt	ons)  cogota	attt catge gagt gatt accta geogg agtge agt	taag ggag actg actg gcaa actg gcaa actg gct acaa actg gct acaa actg gct acaa actg ccaa actg gct acaa actg ccaa actg	gaggi ggtco gggtco gtaat gtaco ggtco agago gctco agago ccto acto acto acto acto acto acto act	test of the control o	ccagt gagac gagac gatacc gatacc gatacc gatacc gatacc tctcc gatacc tctcc gatacc tccc gatacc tccc gatacc tccc gatacc tccc gatacc tccc gatacc tccc agatacc tccc agatacc tccat	egtcag etctcca getcca catgca catctg gggggt ccagca ccagga gacctac gacccag ccaggc acccaggc ccaggc ccaggc ccaggc ccaggc ccaggc ccaggc ccaggc ccaggc ccaggc ccaggc ccaggc ccaggc	60 120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080 1140 1200 1260

Input Set : A:\seqlst.txt

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181 caaageegeg ggaggageag tacaacagea egtacegtgt ggteagegte etcacegtee 1500
182 tgcaccagga ctggctgaat ggcaaggagt acaagtgcaa ggtctccaac aaagccctcc 1560
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187 atcgccgtgg agtgggagag caatgggcag ccggagaaca actacaagac cacgcctccc 1860
188 gtgctggact ccgacggctc cttcttcctc tatagcaagc tcaccgtgga caagagcagg 1920
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193 <211> LENGTH: 469
194 <212> TYPE: PRT
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197 <220> FEATURE:
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203 Val Gln Cys Gln Val Gln Leu Val Glu Ser Gly Gly Val Val Gln
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205 Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
207 Ser Ser Tyr Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
208
                            55
209 Glu Trp Val Ala Val Ile Ser Tyr Glu Glu Ser Asn Arg Tyr His Ala
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211 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Ile
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212
213 Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Thr Glu Asp Thr Ala Val
                                    105
214
215 Tyr Tyr Cys Ala Arg Asp Gly Gly Ile Ala Ala Pro Gly Pro Asp Tyr
           115
                                120
                                                     125
217 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly
219 Pro Ser Val Phe Pro Leu Ala Pro Ala Ser Lys Ser Thr Ser Gly Gly
                                            155
                        150
221 Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val
222
                                        170
                    165
223 Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe
224
                                    185
225 Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val
                                                     205
                                200
227 Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val
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229 Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Pro Lys
230 225
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Input Set : A:\seqlst.txt

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233 Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
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235 Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
           275
                               280
                                                    285
237 Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
                           295
239 Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
                       310
                                            315
241 Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
                                        330
                   325
243 Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
                                    345
245 Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
           355
                               360
247 Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln
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249 Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
                      390
                                            395
251 Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
                   405
                                        410
253 Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
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255 Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
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265 <212> TYPE: PRT
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: Heavy chain of variant of 12.12 human anit-CD40
         antibody
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277 Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
                               40
279 Ser Ser Tyr Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
                           55
281 Glu Trp Val Ala Val Ile Ser Tyr Glu Glu Ser Asn Arg Tyr His Ala
283 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Ile
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VERIFICATION SUMMARYDATE: 05/15/2006PATENT APPLICATION: US/10/578,387TIME: 09:46:00

Input Set : A:\seqlst.txt

Output Set: N:\CRF4\05152006\J578387.raw

L:15 M:270 C: Current Application Number differs, Replaced Current Application No L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:40 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:43 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1 L:532 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:9 L:633 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:11